Product Support Managers Workshop

Sustainment Innovation Enablers

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Deloitte Defense Practice

Our Mission

We are a “Defense-facing” advisory organization

Our clients are Defense organizations – not commercial companies

We do not provide sustainment material, materiel or MRO services

To the extent we help Defense clients succeed, …we succeed

Our objectives and the Department’s objectives are aligned

Sustainment Innovation

Applies to the Full Range of Integrated Product Support Elements

- ✓ The application of better solutions to meet warfighter needs and the military Service's broader requirements

- ✓ Accomplished through more effective and/or efficient:
  - Products
  - Processes
  - Services
  - Technologies
  - Business models

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Warfighter and Military Service Requirements

Opportunities for Innovation

- Materiel readiness
- Reliability
- Maintainability
- Organic repair, maintenance and overhaul organizations
  - Capability
  - Capacity
  - Workflow
  - Workload
  - Depot Cost Recovery Rates

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Innovation Essentials

The Basics

Sustainment professionals with the bandwidth to undertake innovation initiatives

Sufficient, uninterrupted financial resources

Time

Enabling Innovation

There are numerous examples where the Department introduced innovation into its sustainment arrangements, … however

Defense Sustainment Environment Dynamics Favor Industry

Environment significantly constrains the DoD's range of action:

Color(s) of money, …O&M, WCF, R&D, etc.

Budget process, …funds expiration, continuing resolutions, etc.

Congress serving as the Department's Board of Directors

Ownership of all the means of production

Absence of impactful personal incentives to innovate

Existence of real and perceived dis-incentives to innovate

FAR/DFAR, a real and a perceived inhibitor

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Innovation

Industry Plays a Significant Role in Defense Sustainment

Given the right contractual arrangement, industry will alter its behavior in ways that result in better outcomes for the Department, …including innovation

The art of the deal is in finding an arrangement at the intersection of the interests between the Department and its industry sustainment provider

The Department has overwhelming (but not absolute) control over sustainment contract arrangements

Getting to the Right Sustainment Arrangement

What Drives Industry Behavior?

These are the Department's levers to drive industry behavior

Assured Revenue Streams

In the commercial Aerospace and Defense industry, Wall Street and money markets reward companies with steadily growing or steady revenue over companies with greater variability of revenue.

Profit

The statutory and regulatory mandate for companies to optimize the welfare (e.g. profit) of its owners (shareholders).

Return On Invested Capital (ROIC)

A key measure of a commercial firm's success is the efficiency with which it converts shareholder assets into profit. The fewer capital assets required to generate a given level

Offer industry the opportunity to improve them and industry will innovate

Reduce the opportunity and industry curtail innovation

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Sustainment Arrangement Conditions Enabling Innovation

Materiel Readiness, Reliability and Maintainability

Materiel readiness: Contract for outcomes rather than inputs or contributors to materiel readiness

Buy system or sub-system availability to execute the mission

Commercial sustainment provider will require sufficient control over factors impacting availability, …but not 100% of the Integrated Product Support Elements

Materiel Readiness, Reliability and Maintainability: Employ a contract type and length that incentivizes and enables industry to innovate

Typically some form of fixed price contract

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Investment in Innovation and Price to the Department

A Function of Contract Length

Investment in Innovation: Commercial companies innovation investment decisions are driven by the time they estimate it will take to realize a return, … the Payback Period

Longer Periods of Performance incentivize greater investment

Shorter Periods of Performance inhibit investment

Price to the Department: Wall Street, the Money Markets and stockholders highly value assured revenue streams for companies operating in the Defense space

Commercial companies will price more aggressively to acquire a long term contract, .

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Innovation

A Function of Contract Type

In a Fixed Price Contract Arrangement

1 **Company knows its revenue stream with certainty …it's fixed**

2 **Company does not know the costs it will incur over the life of the contract to earn the revenue, … profit and ROIC are "at risk"**

3 **Company optimizes profit and ROIC by driving down its internal costs:**

- ✓Investing to improve MTBF and maintainability
- ✓Leaning out commercial production lines
- ✓Rationalizing sustainment decisions
- ✓Optimizing their supply chains, …2nd & 3rd tier suppliers

Companies price more aggressively to get the initial contract

Department harvests a share of realized savings at option exercise/ contract re-compete

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Innovation and Price to the Department

A Function of Industry's Opportunity to Earn "Risk Adjusted" Returns

Longer Term Fixed Price contracts have inherent benefits and risks for commercial industry:

Assured revenue streams and opportunity to improve profitability by cutting internal costs

Uncertainty regarding the outcomes of its cost cutting plans

Contractually limiting a company's opportunity to realize a risk adjusted return -- typically include caps on realized profit, profit sharing, etc.

Companies will reduce their investment in innovation and cost take out measures accordingly

Sustainment Arrangement Conditions Enabling Innovation

Enhancing Organic Depot Operations, Addressing 50/50 and Core Issues

Commercial sustainment providers are highly incentivized to move work into the Department's organic depots and invest in their operations, …under the right conditions

Favorable cost structure versus their or their sub-tier suppliers' facilities

Prefer Direct Sale versus Work Share arrangements

Profi

Depart ents and inc conditi

Company optimizes profit and ROIC by driving down its internal costs:

- ✓Moving work to DoD MRO facilities
- ✓Helping lean out and rationalize government MRO processes
- ✓Optimizing the end-to-end sustainment value chain

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Sustainment Arrangement Conditions Enabling Innovation

The Basics

- Acquire the real outcome you need rather than inputs
  - Define the outcome(s)
  - Select the appropriate metric(s) to measure the degree to which the outcome is achieved
  - Assign targeted levels of performance
  - Provide impactful incentives for achievement of the targets and / or dis-incentives for failure to meet the targets
- Employ some form of a Fixed Price contract structure
- Provide an appropriate Period of Performance
  - Long enough for industry to recoup its investments and earn a risk adjusted return

Sustainment Arrangement Conditions Enabling Innovation

The Basics

Avoid the trap of imposing limits on the profits a company realizes during the Period of Performance

Profit limits appear to work to the government's advantage and provide the "sense" that scarce taxpayer dollars are being protected

Counter-intuitively, …they do not work to the government's advantage

Profit limits drive down investment in innovation and other forms of sustainment cost take out

Providing industry the maximum incentives to innovate and take cost out results in the optimal outcome for the Department, including

Improved materiel readiness

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Sustainment Arrangement Conditions Enabling Innovation

Caveats

This approach:

May not be appropriate for systems or sub-systems with highly unpredictable failure rates or for equipment just entering the inventory, …particularly where new technology is involved

Is more complex than simply acquiring an MRO service or replacement material/materiel, …the most prevalent contemporary practice

Takes more time to initially develop and deploy than a single “fail and fix” or “fail and replace” contract

However, …the payback in readiness and cost-per-unit of readiness make the “view worth the climb”

These Are Government Sustainment Providers' Levers

Use Them Wisely

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Questions